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10/713,443	11/14/2003	Brando H. Balarezo	70012200-0014-005	9619

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EXAMINER

NGUYEN, KIMNHUNG T

ART UNIT	PAPER NUMBER
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2629

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/713,443	Applicant(s) BALAREZO, BRANDO H.	
	Examiner Kimnhung Nguyen	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-7 is/are rejected.
- 7) ☒ Claim(s) 2-3 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

This application has been examined. The claims 1-8 are pending. The examination results are as following.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Bourdelais et al. (US 7,009,771).

As to claim 1, Bourdelais et al. discloses in fig. 2, a display device, comprising:

A display area (see back-lit LCD display screen, see col. 20, lines 21-22), said display area being at least partially translucent (because Bourdelais et al. discloses discloses LCD display screen having a portion such as the complex lens 22 and optical spacer 24 in the form of transparent polymeric film and the film is utilized to diffuse light energy exiting the guide light in a direction perpendicular to the guide diffuser, see col. 13, lines 24-26)

an illumination source (18) disposed behind said display area (see col. 4, lines 28-30, and fig. 2, see col. 20, lines 21-26); and

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a diffuser baffle (light diffusing film 12) disposed between said illumination source (18) and said display area (because light source placed behind the LCD screen, see col. 20, lines 21-23), said diffuser baffle (12) comprising:

at least one spacer (see geometrical spacers 24, fig. 1); and

at least one diffuser lens (complex lens 22 is formed of transparent polymeric film) disposed adjacent to said at least one spacer (see geometric spacers 24 in the form of transparent polymeric film is utilized to diffuse light energy exiting the light guide, see col. 13, lines 23-26)

wherein said at least one spacer (24) forms a gap between said at least one diffuser lens (complex lens 22 is transparent polymeric film) and one of said display area (display screen) and said illumination source (18, see col. 3, lines 65-67, and col. 4, lines 1-3).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bourdelai et al. (US 7,009,771).

As to claim 8, Bourdelais et al. discloses further wherein the first spacer (24) and the first diffuser lens (22) are laminated together in a substantially transparent laminating material

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(because optical spacer or spacer 24 is transparent material such as glass or polymer that provides a specified space between two optical components and example an optical spacer is a light diffuser comprising a rough surface, and an integral geometric optical spacer is a geometrical shape and is formed simultaneously with the functional optical element and thus is integral to the optical element, see col. 5, lines 3-20, and col. 18, lines 55-61, for details of the explanation), and the gap formed by the first spacer (24). However, Bourdelai et al. does not disclose the first spacer includes an inert gas.

Bourdelai et al. discloses the optical spacer (24) is a transparent material group (see col. 5, lines 4-10, this feature related to the first spacer includes an inert gas as claimed by the invention).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the optical spacer is a transparent material group as taught by Bourdelai et al. to provide a specified space between two optical components, for example an optical spacer is a light diffuser comprising a rough surface using the index of refraction different between the air and the light diffuser to provide light diffuser, if the air is eliminated between the diffuser, the light diffuser will lose efficiency (see col. 5, lines 4-10). Therefore, the transparent material group is any group of rare gases because it does not active as gases as claimed invention.

5. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bourdelai et al. (US 7,009,771) in view of Hara et al. (US 2003/0067436).

As to claim 4, Bourdelai et al. discloses the display device comprises the illumination source (18) and at least one light device (see display devices such liquid crystal display devices as a high light transmission rate (see col. 4, lines 28-33) and an inherent electrically coupled to

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an electrical power source (because Bourdelai et al. discloses the liquid crystal display devices a high transmission and allows the power consumption for the backlight to be reduced, and therefore extending the lifetime of a battery power liquid crystal devices that are common for note book computers, see col. 4, lines 4, lines 27-38 for details of the explanation).

As to claim 5, claim 5 depends on claim 4 and is rejected on the same reasons of claim 4. Further, Bourdelai et al. discloses every feature of the claimed invention as discussed above, however Bourdelai et al. does not disclose wherein the at least one light device is an LED.

Hara et al. discloses in fig. 1A-1B, a backlight device for transmissive device includes a plurality of LED 30, see 0034).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement a plurality of LED as taught by Hara et al. in to the display device having illumination source of Bourdelai et al. for producing the claimed invention because this would provide a range of low brightness, an LED has a higher power efficiency than a cold cathode fluorescent lamp, and the power would be dissipated if the cold cathode fluorescent lamp was used (see Hara et al., see 0027).

As to claim 6, depends on claim 4 and is rejected on the same reasons of claim 4. Further, Bourdelai et al. does not disclose the display device further comprising a switch operable to control the operation of the at least one light device.

Hara et al. discloses in fig. 1A-1B, a backlight device for transmissive device comprising a switch operable (see switching control unit 72, fig. 1A) to control the operation of the at least one light device (LED 30, fig. 1A).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the switch operable to control the operation of the at least one light device as taught by Hara et al. into the display device having light source of Bourdelai et al. for producing the claimed invention because this would provide a control signal to activate the LED driving unit 76 to control the brightness of the LED's 30 in accordance with the desired display brightness (see Hara et al., see 0042).

As to claim 7, claim 7 depends on claim 4 and is rejected on the same reasons of claim 4. Further, Bourdelai et al. does not disclose the display device further comprising an electronic circuit to control the operation of the at least one light device.

Hara et al. discloses in fig. 1A-1B, a backlight device for transmissive device comprising an electronic circuit (see switching control unit 72, fig. 1A) to control the operation of the at least one light device (LED 30, fig. 1A).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the electronic circuit to control the operation of the at least one light device as taught by Hara et al. into the display device having light source of Bourdelai et al. for producing the claimed invention because this would provide a control signal to activate the LED driving unit 76 to control the brightness of the LED's 30 in accordance with the desired display brightness (see Hara et al., see 0042).

Allowable Subject Matter

6. Claims 2-3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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7. The following is a statement of reasons for the indication of allowable subject matter:

The present invention is directed to a display device comprising a display area being at least partially translucent; an illumination source disposed behind the display area; and a diffuser baffle disposed between the illumination source and the display area, the diffuser baffle comprising at least one spacer; and at least one diffuser lens disposed adjacent to the at least one spacer. The closest prior art of Bourdelais et al. (US 7,009,771) shows a similar invention, however, he fails to teach a second spacer disposed on a side of said at least one diffuser lens opposite from the at least one spacer; and a second diffuser lens disposed adjacent to said second spacer, wherein said second spacer form a gap between said second diffuser lens and one of said display area and said illumination source as claim 2.


Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Kimnhung Nguyen
Patent Examiner
July 20, 2006